

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-16. (Canceled)

17. (Previously Presented) A method for filtering a dirt and debris laden air flow, the method comprising:

providing a hand-held vacuum with a housing, a motor, a battery, an impeller, a container and a filter, the housing including a front wall and a handle that is adapted to permit a user to employ the hand-held vacuum for vacuuming with a single hand, the impeller being disposed within the housing, the container having an integral inlet port for receiving the dirt and debris laden air flow therethrough, the container defining a dirt collection chamber in which the integral inlet port longitudinally extends, the container being attached to the housing and forming at least a portion of an exterior surface of the hand-held vacuum, the container being configured to retain dirt and debris removed from the dirt and debris laden air flow and at least a portion of the filter being disposed between the front wall and the inlet port;

providing electrical energy from the battery to the motor to cause the impeller to rotate and generate the dirt and debris laden air flow; and

swirling the dirt and debris laden air flow around a perimeter of the filter within an interior of the container.

18. (Original) The method of Claim 17, further comprising removing the container from the housing to empty the container.

19. (Previously Presented) The method of Claim 18, wherein the container and the inlet port are fixedly coupled to one another.

20. (Withdrawn) The method of Claim 17, further comprising pivoting the inlet port relative to the housing to gain access to the container.

21. (Withdrawn) The method of Claim 20, further comprising rotating the housing with the single hand grasping the handle to overturn the vacuum and empty the container.

22-31. (Canceled)

32. (Previously Presented) A hand-held portable vacuum comprising:
a housing having a front wall and a handle;
a dirt cup having an inlet port and defining a container for storage of dirt and debris therein, the inlet port extending longitudinally in the container, the dirt cup being removably attached to the housing, the inlet port extending rearwardly toward the front wall when the dirt cup is coupled to the housing;
a battery coupled to the housing;
an impeller and motor assembly at least partially disposed in the housing, the impeller and motor assembly receiving electrical energy from the battery and generating an air flow that flows through the inlet port;
a filter at least partially disposed between the front wall and the inlet port; and
means for swirling the air flow about an interior of the dirt cup in a helical manner between the inlet port and the filter.

33. (Previously Presented) The hand-held vacuum of Claim 32, wherein the swirling means includes a flow deflector associated with the inlet port of the dirt cup.

34. (Original) The hand-held vacuum of Claim 33, wherein the flow deflector is an elbow.

35. (Withdrawn) The hand-held vacuum of Claim 32, wherein the swirling means includes a plurality of vanes disposed in an axially spaced relation to the inlet port.

36. (Withdrawn) The hand-held vacuum of Claim 35, wherein the vanes are associated with a prefilter, the vanes being disposed between the inlet port and the filter.

37. (Previously Presented) A hand-held portable vacuum comprising:

a housing having a front wall and a handle;

a dirt cup having an inlet port and defining a container for storage of dirt and debris therein, the inlet port extending longitudinally in the container, the dirt cup being removably attached to the housing, the inlet port extending rearwardly toward the front wall when the dirt cup is coupled to the housing;

a battery coupled to the housing;

an impeller and motor assembly at least partially disposed in the housing, the impeller and motor assembly receiving electrical energy from the battery and generating an air flow that flows through the inlet port;

a filter at least partially disposed between the front wall and the inlet port; and

a flow deflector associated with the inlet of the dirt cup, the flow deflector being configured to direct the air flow toward an interior surface of the dirt cup in a manner that causes dirt and debris entrained in the air flow to swirl circumferentially around the interior surface of the dirt cup.

38. (Previously Presented) The hand-held vacuum of Claim 37, wherein the flow deflector is an elbow that is coupled to the inlet port.

39. (Previously Presented) The hand-held vacuum of Claim 37, wherein the flow deflector is attached to a rear end of the inlet port.

40. (Previously Presented) The hand-held vacuum of Claim 39, wherein the flow deflector has an outlet and wherein the outlet faces a side of the dirt cup and rearwardly toward the housing.

41. (Previously Presented) The hand-held vacuum of Claim 37, wherein the dirt cup has a substantially smooth interior surface.

42. (Previously Presented) The hand-held vacuum of Claim 32, wherein the dirt cup has a substantially smooth interior surface.

43. (Previously Presented) The hand-held vacuum of Claim 33, wherein the flow deflector alters the course of the air flow exiting the inlet port.

44. (Previously Presented) The hand-held vacuum of Claim 34, wherein the elbow is coupled to a rear end of the inlet port.

45 (Previously Presented) The hand-held vacuum of Claim 44, wherein the elbow includes an attachment portion and wherein one of the attachment portion and the inlet port is received into the other one of the attachment portion and the inlet port.

46. (Previously Presented) The hand-held vacuum of Claim 45, wherein the attachment portion and the inlet port are frictionally engaged to one another.

47. (Previously Presented) The hand-held vacuum of Claim 44, wherein the elbow is removably coupled to the inlet port.

48. (Previously Presented) The hand-held vacuum of Claim 34, wherein the elbow has outlet that is configured to cause the air flow to flow in a direction, the direction extending laterally to a side of the dirt cup and rearwardly toward the housing.

49. (Previously Presented) A method for filtering a dirt and debris laden air flow, the method comprising:

providing a hand-held vacuum with a housing, a battery, an impeller and motor assembly, a dirt cup and a filter, the housing including a front wall, a forward portion, a rearward portion, a body portion and a handle that extends between the forward portion and the rearward portion, the handle being offset from the body portion to define a handle aperture therebetween, the battery being coupled to the housing, the impeller and motor assembly being disposed within the housing, the dirt cup being removably coupled to the housing and defining a container with an inlet port to receive the dirt and debris laden air flow therethrough, the container forming a portion of an exterior surface of the hand-held vacuum and being configured to retain dirt and debris removed from the dirt and debris laden air flow and the filter being at least partially disposed between the front wall and the inlet port;

providing electrical energy from the battery to the impeller and motor assembly to cause the impeller and motor assembly to generate the dirt and debris laden air flow; and
directing the dirt and debris laden air flow longitudinally through the container and thereafter in a circumferential direction about the container before the dirt and debris laden air flow enters the housing.

50. (Previously Presented) The method of Claim 49, wherein the dirt and debris laden air flow impinges an interior surface of the dirt cup.

51. (Currently Amended) A method for filtering a dirt and debris laden air flow, the method comprising:

providing a hand-held vacuum with a housing, a battery, a motor, an impeller, a dirt cup and a filter, the housing including a forward portion, a rearward portion, a body portion and a handle that extends between the forward portion and the rearward portion, the handle being offset from the body portion to define a handle aperture therebetween, the battery being coupled to the housing, the motor being disposed within the housing, the impeller being coupled to and driven by the motor, the dirt cup being removably coupled to the housing and defining a container with an inlet port to receive the dirt and debris laden air flow therethrough, the container being configured to retain dirt and debris removed from the dirt and debris laden air flow and the filter being disposed between the impeller and the inlet port;

providing electrical energy from the battery to the motor to rotate the impeller and thereby generate the dirt and debris laden air flow; and

directing the dirt and debris laden air flow in the dirt cup through the container in a direction that is parallel to a longitudinal axis of the container and thereafter in a direction about the filter before the dirt and debris laden air flow enters the housing so that the filter is not directly in-line with air exiting the inlet port.